

Brainstorming

“The gathering your brain’s energies into a “storm” and transforming the energy into ideas!”

<http://writingcenter.unc.edu/handouts/brainstorming/>

What Inhibits Creativity/Brainstorming?

FEAR

Your on the spot...asked to share an IDEA

Two things typically happen

You've got nothing

Brainstorming stirs up the dust, and gets the breeze of inspiration moving again.

You've got too much

Brainstorming forces the mental chaos and random thoughts to rain out onto your page. Then you can organize them into a logical sequence.

Need time to think...

- A limitation on Brainstorming is the fact that a discussion can be dominated by a few individuals.

The process can pass over those quiet people who may have to mull things over.

An enhanced process is as follows: Present the proposed problem or issue to be resolved; tell interested parties to come back tomorrow with their suggestions on 3x5 cards or Post-Its; then do an AFFINITY DIAGRAM which groups similar ideas together. The grouped ideas can be clarified and/or simplified and then a decision made on a path.

How to Get Past the **Fear**

- 1. ADMIT IT** you are scared! Tell the truth – be real.
- 2. OWN IT** take responsibility for your fear, don't blame others.
- 3. FEEL IT** allow yourself to feel it even if it is uncomfortable.
- 4. EXPRESS IT** – Say it, write it, yell do something the more passion you use the sooner your fear will move through you.
- 5. LET IT GO** – Declare “I am choosing to let go of my fear and use its energy in a positive way”.
- 6. VISUALIZE** the results you want
- 7. TAKE ACTION** DO IT

OTHERS MUST RESPECT THE TRUTH!

Information from: <http://mike-robbins.com/how-to-move-through-your-fear/>

Brainstorming Guidelines

Focus on quantity

Capture as many ideas as you can!

Withhold criticism

No put downs!

Encourage wild ideas

Wild ideas lead to innovative designs!

Record all ideas

Write everything down as it comes out!

Combine ideas

Build upon the ideas of others!

Stay focused

Focus your ideas on the topic at hand!

Design Step 3: Brainstorming Possible Solutions Activity — Brainstorming Guidelines Handout

Brainstorming **TOOLS**

- **KWL Chart** – What do you KNOW, WONDER and LEARNED
- **Brain Write** – write it down!
- **Questions** – (QFT format)
- **Webbing and Concept Maps**
 - Bubbl.us, <https://bubbl.us/b>.
 - Gliffy, <http://www.gliffy.com/>

ENGINEERS BRAINSTORM TOO

They start by having a good understanding of their DESIGN CHALLENGE

During the design challenge they list all the problems they need solve.

Then generate large number of potential solutions to a by problem by BRAINSTORMING!

Activity

Your group has 20 minutes to

- Choose one tool or technique
- Create a project goal
- Product or deliverable

Problem: The school is generating a lot of garbage

Discussion

1. How useful was the brainstorming for generating ideas?
2. What worked well?
3. What didn't work well?
4. How could you see using the brainstorming techniques in your own project?